

get an Air Force ROTC scholarship and used it to get my undergraduate degree in chemistry. The Air Force also allowed me to go on to graduate school and delay my entry to active duty. I earned my masters and was well on the way to my doctorate when I was finally called up to serve. I was elated when I got a laboratory assignment to work on new warheads for air-to-surface missiles.

My euphoria was short-lived. Immediately after I arrived, the Air Force decided to contract out most of their warhead research. I was reassigned as an R&D project manager with responsibility for part of this research. As a consolation, I was sent off to a three-week Air Force training program on R&D project management, but I still felt inadequate for the task. I wasn't sure why at the time, but looking back I think the training concentrated too much on the "programmatics" of cost, schedule, and performance, and not enough on how to really manage a project.

Still wanting to learn, I decided to switch to a more practical strategy. There were lots of project managers in my new organization, many who had been at it for years. I decided to pick a few and pay closer attention to what they were doing.

The first and most obvious candidate was my officemate Ed. He had worked in the lab for years and was way above the rest of us technically. At first glance he appeared shy, but he was quite personable when you got to know him. What stood out about Ed was his work ethic; he was so interested in his work that he had set up a small laboratory at home in his garage. Tinkering on his own, he had actually developed a new formula for incendiary material. He passed this on to his contractor, and it later became the basis for a successful fielded system. I was puzzled that Ed hadn't been promoted to a higher level in the organization.

The puzzle didn't last long however. As I watched more carefully, I discovered that Ed was weak as a communicator. He was a poor writer and had an outright phobia for giving briefings. Once when he was scheduled to give a project briefing to upper management, he called in sick, and his branch chief had to give the briefing for him on short notice.

I decided to switch my attention to Jim, who was the real star performer in our division. He was young, energetic, and articulate. He never seemed to miss an opportunity to talk about his project. This was important since our laboratory projects were always short of

funding, and the more visible your project was the more likely it was to be funded.

My decision to watch Jim was reinforced when he was moved from the laboratory up to our product division to manage a new major weapons program. Jim's enthusiasm was contagious. He was a natural magnet who drew people and funding to his project. Still, he wasn't perfect. Sometimes he got carried away with his enthusiasm, and it affected his judgment. I watched one high-level briefing where his "can do" attitude led him to make several technical projections, which he later was unable to deliver. He was forgiven but this flaw eventually caught up to him, and he was transferred to a deadend position in our test organization.

Finding the ideal project manager was proving more difficult than I anticipated. I bumped around the laboratory and future plans division for a few years and then made a career change to training. I joined the faculty of the Defense Systems Management College (DSMC), the center of project management training in the Department of Defense (DoD). Our main mission was teaching future DoD project managers, but the faculty was also encouraged to do research and writing.

The best data came from having managers recount critical incidents that occurred on their projects.

I decided to channel my interest in the ideal project manager into a research project. While my "people watching" strategy hadn't exactly borne fruit during my early project management career, I concluded that the approach was still sound. Surprisingly, this method of "success modeling" was widely endorsed by esteemed publications from *The Handbook of Leadership* to the best seller *Think and Grow Rich*. There were also high-priced consulting firms using it to create competency models and professional development programs for a variety of career fields, which did not yet include project management. So I obtained some funding and started a research project myself.

There was no better place to study project manager characteristics than DSMC, the "Mecca" for DoD project managers. We had former project managers as faculty, future project managers as students, and current project managers as guest speakers. This latter category interested me the most. I took a lot of survey and interview data from practicing project managers, but the best data came from having these project managers recount critical incidents

that had occurred on their projects. This is very similar to the "learning through stories" approach used by NASA.

Our flagship course at DSMC was the 20-week program management course and we prided ourselves on bringing top-level project managers in as guest speakers. I checked the list of guest speakers for the current course and noticed that we had scheduled two high ranking Air Force project managers one week apart. Each was a brigadier general managing the largest project in his product division. I would make it a point to watch both speakers and look for the similarities.

They weren't playing the role of project manager. They were being themselves.

The first project manager had a reputation as a tough, hard-nosed manager and he lived up to that reputation in person. He was a "pusher." He pushed hard on himself, his people, his contractors and on anyone who got in his way. He was very confident and articulate. As he talked to our students, I had a momentary flashback to the movie Patton. Here was the project management equivalent to George C. Scott as General Patton making his famous speech to the troops. The analogy was almost perfect.

A week later the second guest speaker came in, also a brigadier general but from a different Air Force product division. He was much more "low key" than his counterpart. While he spoke softly, he still commanded our attention. What was most remarkable about this project manager was his constant reference and deference to his people. He attributed his success in project management to pulling together an excellent team and giving them lots of leeway and support to do their jobs. I again flashed back to the Patton movie, and here was the equivalent of Karl Malden as General Omar Bradley. Again, the analogy was almost perfect.

Both project managers had come and gone as guest speakers, and I took stock of what I learned. I had expected to find some clearly evident characteristics common to both. But this was not to be. In fact, I had a hard time identifying any similarities between the two of them at all. The appearance of two completely opposite, yet successful, project management styles left me in a state of "cognitive dissonance."

Not wanting to give up completely, I reflected for a moment. If the two project managers had no clear similarities on the surface, what about less obvious

similarities? I thought about this for a moment. Clearly, both were successful. They were one-star generals managing two of the largest programs in the Air Force. They achieved program outcomes and delivered systems to the warfighter. They got RESULTS. (Both continued to advance in their careers and later retired as three-star generals.)

While their styles were quite different, both project managers were true to themselves. What you saw was what you got. They weren't playing the role of project manager. They were being themselves. They had personal CREDIBILITY.

As it turned out, wading through lists of competencies from my formal research project provided no more significant insight than I got from watching these two experienced project managers. Every project manager I interviewed or surveyed in my research was different, but they were able to get results with a style based on their personal credibility.

So what about the differences? That I have come to realize is the nature of project management and life in general. Projects are different, project managers are different, project teams are different, and the environment for each project is different and constantly changing. This leads to my final conclusion that there is no ideal project manager nor should there be. I think that is what attracted me to project management in the first place and what will keep me engaged in a lifetime of research and reflection in this field.

Lessons

- Technical expertise and experience aren't the only ingredients necessary to succeed in project management.
- You can learn a lot by carefully watching and listening to experienced project managers, but you may need to reflect on it to find the real meaning.
- · Personal credibility and achieving results are key to project management success, but there are many paths to get there.

DR. OWEN GADEKEN is a Professor of Engineering Management at the



Defense Acquisition University where he has taught the Department of Defense Program and project managers for over twenty years. He is a retired Colonel from the Air Force Reserve and a Senior Reservist at the Air Force Office of Scientific Research. In addition to

serving on the ASK Review Board, Dr. Gadeken has published both his stories and practices in various issues of ASK Magazine.